CAO CITIES ANNUAL REPORT 2019



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WELCOME MESSAGE

"Globally, greenhouse gas emissions need to halve by 2030 and cities are showing it is possible."

Bringing together 96 cities representing more than 700 million people and one quarter of the global economy, C40 was founded by mayors, for mayors, to take ambitious climate action. C40 is now leading the charge for a Global Green New Deal — a series of essential steps to cut emissions, invest in clean energy, protect our natural resources, and ensure a just transition for all, and particularly the most disadvantaged.

We have seen great progress over the last year, but as the climate crisis deepens C40 cities' action needs to step up further. As our new Chair, Los Angeles Mayor, Eric Garcetti, said: "When it comes to climate action, no one is doing more than cities, but nobody is doing enough. The 2020s will be a make-or-break decade for the survival of our environment and the strength of our economy, and I have no doubt that C40 will stand front and center in the battle to build a more sustainable, inclusive future for every worker and family in every community around the world."

Mayor Garcetti took over as C40 Chair from Mayor of Paris, Anne Hidalgo, in December 2019. "Being the irst woman C40 Chair was a great honor," said Mayor Hidalgo. "During this time, we strived to put people back at the centre of the decisionmaking process and give voice to the voiceless. United and all together, we will achieve the Paris Agreement goals. As of today, cities are now recognised as leading actors to defend climate and social justice in the world".

This report sets out C40's achievements in 2019. This was a monumental year in which we saw the accelerated steps C40 cities are taking to reduce emissions and climate risks. C40 continued to lead globally with agenda-setting declarations and events, not least the C40 World Mayors Summit, and continued to support cities in removing barriers to bold action.

The science is clear. We need to act faster and with more urgency to avoid a climate breakdown. Fortunately, C40 cities are already delivering climate action that can help secure a healthy, prosperous and equitable future for all.



Mark Watts, Executive Director C40 Cities

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C40 connects 96 of the world's largest and most influential cities, representing 700+ million citizens and one quarter of the global economy. Member cities use a science-based approach and exchange of best practices to take the urgent and effective action needed to confront the climate crisis and keep global heating below 1.5°C, aiming to collectively halve greenhouse gas emissions by 2030. C40 mayors are committed to increasing resilience, cleaning the air we breathe and taking inclusive climate action to create a healthier and more sustainable future.

Mayor of Los Angeles, Eric Garcetti, started his term as C40 Chair on December 1, 2019, succeeding the Mayor of Paris, Anne Hidalgo. Michael R. Bloomberg serves as President of the C40 Board. C40's strategic funders are Bloomberg Philanthropies, the Children's Investment Fund Foundation, and Realdania, along with a number of funders listed in the Funders and Partners section.

AFRICA

LATIN AMERICA

NORTH AMERICA

C40 Participation Standards

The C40 Participation Standards are conditions for ongoing C40 membership. They also encourage all cities to have developed and be implementing, by the end of 2020, a climate action plan compatible with the Paris Agreement goal to constrain global average temperature rise below 1.5°C, while improving resilience and inclusivity.

C40 measures the level of participation of its member cities on an annual basis and recognises the most active cities in each region (for 2019 below); those which took exceptional measures, contributed additional resources, provided thought leadership and represented the C40 network globally.

By setting tough participation standards, C40 ensures consistent and robust participation from its member cities. We do not ask for fees, we ask for action.

CENTRAL EAST ASIA

SOUTH AND

WEST ASIA

• Dubai

EAST, SOUTHEAST, ASIA AND OCEANIA



EUROPE



A data and science-based approach

C40 has been a data-driven organization since its infancy, inspired by the approach of then-Chair Michael R. Bloomberg. C40 continues to focus resources on areas with the greatest and most cost-effective potential for reducing emissions and improving resilience.

C40's key programmes are driven by data-based reports like Deadline 2020, and assigned quantifiable targets. Our progress on these targets is monitored thanks to reporting frameworks like the <u>Global</u> Protocol for Community-Scale Greenhouse Gas <u>Emission Inventories (GPC)</u>, the <u>Carbon Disclosure</u> <u>Project (CDP)</u>, and the <u>Global Covenant of Mayors'</u> <u>Common Reporting Framework (CRF)</u>, ensuring consistency across our regions and with the work of partner organizations.

Regionalised strategy

The central premise of C40's collaborative model is that there is more that unites the great cities of

the world than divides them. Whilst the majority of C40's work is global in scope, we also consider the specific conditions of C40's individual member cities and deliver some of our work through regionally-specific programmes.

For example, C40 megacities in Asia, Africa and Latin America are characterized by rapid urban development on an unprecedented scale. Many of these cities have historically done little to cause climate change, but decisions in these regions will have an enormous impact on global efforts to limit global temperature rise to 1.5°C. C40 has focused on supporting cities in these regions through direct capacity-building assistance to deliver quick, high-impact actions that will significantly reduce greenhouse gases.

C4O's focus in the Global North is primarily on supporting cities in exchanging best practices and working with partners to pilot new urban climate solutions.





∧ 53 ^{C40} cities

peaked or are expected to peak emissions by the end of 2020



There are more than **66,000**

electric buses on the streets of C40 cities, compared to fewer than 100 in 2010

Ten C40 C40 cities

have banned or restricted single-use, non-recyclable plastics, compared to 2 in 2010

§17

global south cities

are supported by the C40 Cities Finance Facility on preparation of projects worth **USD\$650 million**

of C40 cities report already feeling the effects of climate change, and nearly all are at risk

Over

80 C40 +

34 non-C40 cities committed to develop 1.5 °C aligned, resilient and inclusive climate action plans and 12 C40 cities have already completed the plans



have committed to achieving 100% renewable electricity by 2030, compared to 5 in 2010

17^{C40} cities

have restrictions on high-polluting vehicles that cover a significant part of the city, compared to 6 in 2010

have implemented cycle hire schemes, compared to 21 in 2010

OUR SCIENCE-BASED APPROACH TO AVOIDING **A CLIMATE BREAKDOWN**



Following the signing of the Paris Agreement, C40 and ARUP published the <u>Deadline 2020: How Cities</u> <u>Will Get the Job Done</u> report (2016). It identifies C40 cities' share of the remaining global carbon budgets to 2100 for a 1.5°C scenario.

Deadline 2020 is the cornerstone of C40's 2017-2020 Business Plan. Its central focus is committing every C40 mayor to developing and implementing a 1.5°C compatible, resilient and inclusive climate action plan. It puts specific focus on sectors where city government has power to develop policy and take transformational actions: reduce transportation emissions, improve building energy efficiency, increase the supply of green energy, and change consumption patterns, while strengthening the ability to deal with the impacts of climate change.

80 C40 cities, representing over 600 million people through their metropolitan areas, have committed to Deadline 2020 targets as of the end 2019, compared to 20 <u>countries</u> worldwide.

C40's Theory of Change is that cities are most likely to make a powerful contribution to cutting global emissions and improving resilience if they have a robust climate plan and identified priorities, political will is strengthened through collaboration, and collective city influence is u tilised to access resources and partnerships, and overcome barriers. If C40 can support cities in overcoming the most frequent barriers for action in the most high-impact areas, it will demonstrate that it is still possible to deliver the change we need.

Deadline 2020 Climate Action Planning Programme

To support C40 cities in meeting Deadline 2020, C40 launched its Climate Action Planning Programme

in 2017. It supports C40 cities to strengthen their climate planning capacity and develop ambitious climate action plans that aim to reduce emissions in line with the 1.5°C pathways, adapt to climate impacts, and create wider social, economic and health benefits.

Through the generous support of the UK, German and Danish governments, and C40's strategic funders (Bloomberg Philanthropies, the Children's Investment Fund Foundation, and Realdania), C40 is providing in-depth technical assistance to over 37 primarily Global South cities across C40 regions. Technical assistance has included a dedicated city advisor for most cities as well as peer-to-peer collaboration, and helps cities to assess GHG emissions and climate risk, and develop an ambitious inclusive climate action plan (<u>Climate Action Planning Framework</u>).

Other C40 (and non-C40) cities also benefit from climate action planning tools, peer-to-peer collaboration, climate action planning webinar series, training and other resources on the publicly accessible <u>Climate Action Planning Resource Centre</u>.



A growing number of cities have published their inclusive climate action plans aligned with the 1.5°C pathways and building city resilience. Durban (eThekwini) is the first C40 Global South city to have developed such a plan.





1.5°C Aligned, Resilient and Inclusive Climate Action Plans



CITY HIGHLIGHT

The Durban <u>Climate Action Plan</u> emphasises the importance of strong adaptation actions to mitigate the harmful effects of climate change, such as improving water availability, increasing ecological infrastructure to limit the impacts of flooding and building resilience of informal settlements.

It aims to achieve an 80% reduction in carbon emissions by 2050 (whilst exploring opportunities to achieve carbon neutrality), by focusing on renewable electricity and shifting towards clean, efficient and affordable transport.

Notably, the Durban Climate Action Plan recognises its implementation will require a shift in governance in order to ensure that climate change is mainstreamed across key sectors, as well as with external stakeholders.

Snapshot of emissions reductions in C40 cities¹

Thanks to robust city <u>GHG inventories</u> developed with C40 support following the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) and regular data reporting as a membership condition, cities can track their joint progress. Globally, emissions have risen by nearly 70% since 1990. In contrast:



Representing over 160 million people and \$10.8 trillion in GDP in their metropolitan areas, have registered five years of emission reductions ("peak emissions"), or are expected to do so by the end of 2020.

The Empowering Cities with Data Programme supports 10 Global South cities with data collection to help improve city data management processes and monitoring. A <u>best practice city climate data</u> <u>management framework and tool</u> were published in 2019. Examples of projects the data assistance will inform include: waste treatment technology in Accra, clean energy to informal settlements in Lagos, air quality forecasting in Quito, solar systems in Johannesburg, optimization of public transport routes in Lima, and development of vehicle standards in Addis Ababa.



 The Paris Agreement accepts that emissions are likely to continue to rise in some developing countries in the 2020s. C40's analysis shows that around 20 member cities can continue to increase emissions until after 2025, but every other city needs to have started cutting emissions by this point.

Thriving Cities: C40's approach to consumption-based emissions

As reported in The Future of Urban Consumption in a 1.5°C World even though many C40 cities in the Global North have reduced GHG emissions produced within their geographic boundary (e.g. power generation), emissions related to the consumption of imported goods (such as food, clothing, and electronics) have, on average, increased by close to 60%. City leaders need to work in partnership with local communities and businesses to accelerate climate action, build resilient communities and address harmful patterns of consumption and production.



The C40 Thriving Cities Initiative is an approach that opens up new thinking for transformation, to shift mindsets and build ecologically safe and socially just communities. Working with Amsterdam, Philadelphia and Portland, the Initiative helps local coalitions of community change-makers address the environmental and social challenges brought by a consumer-focused economy, by creating stronger communities, addressing work-life balance, and breaking the logic of the consumerism cycle.

Sharing Lessons and Resources with Non-C40 Cities

Fulfilling C40's true mission as a climate leadership group, C40 mayors have already inspired over 34 non-C40 mayors to also commit to set 1.5°C aligned climate targets and develop and start implementing ambitious climate action plans. C40 is working with partners to share cities' best practices, for example through the Science-Based Targets Initiative, WWF One Planet City Challenge, Alliances for Climate Action, among others.

C40 also joined forces with the World Bank, the World Resources Institute and ICLEI under the Global Platform for Sustainable Cities. Funded by the Global Environment Facility, it supports 11 developing countries and 28 cities with approximately \$151 million in grant funding.

In 2019, C40 led efforts to deliver a Global Platform for Sustainable Cities <u>Climate Action Planning</u> <u>City Academy</u> in Sao Paulo. It brought together representatives from 15 cities (Abidjan, Asuncion, Beijing, Brasilia, Dakar, Johannesburg, La Paz, Lima, Melaka, Palmas, Recife, São José de Campos, São Paulo, Teixeira de Freitas and Xalapa) to discuss challenges related to climate action planning and learn from technical experts.

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ALCALDÍA

C40 CITIES

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Climate Action Planning

MATICO

HOW CITIES ARE ALREADY ADAPTING TO **CLIMATE CHANGE**

Over 97% of C40 cities already report feeling the effects of climate change, and nearly all are at risk. Supporting climate adaptation efforts is therefore a critical part of C40's approach.

Adaptation Planning

Through its Adaptation Academy in Rotterdam, C40 offers a flagship training programme for cities to develop robust, integrated and inclusive adaptation plans. The masterclasses equip participants with technical knowledge on delivering the climate action planning process: risk assessment, strategy development, implementation & mainstreaming, as well as monitoring & evaluation. In 2019, 13 cities have been trained, including Hanoi, Rio de Janeiro, Curitiba, Medellin, Guadalajara, Salvador, São Paulo, Lima, Quito and Buenos Aires.

Adaptation Implementation Programme

The Adaptation Implementation Programme & networks support the development of solutions to tackle high-impact climate risks and integrate adaptation considerations across energy, buildings, transportation, planning and waste management.

The Cool Cities Network brings together around 30 C40 cities to address the impacts of extreme heat events and the urban heat island effect. As a result of network engagement, Rio de Janeiro is now developing a 'Heat Action Plan' integrating all cooling-related actions from across the city into one comprehensive strategy. Inspired by Washington, DC's innovative funding methods to cool the city, Melbourne has partnered with the state government to test a targeted grants funding stream for greening the private realm.

The Connecting Delta Cities Network unites the largest delta and port cities of the world. Members are advancing best practice on coastal protection barriers (New York, Hong Kong, China and Copenhagen), coastal flood modeling and real-time mapping (Rio and Washington DC), drainage plans upgrades accounting for changing sea levels and groundwater tables (Shanghai), land use, building and infrastructure codes in coastal zones to design assets accounting for projected climatic impacts (Cape Town). The Urban Flooding Network hosted its first Global Workshop in São Paulo in 2019, to discuss urban flooding risk assessment, emergency responses, and flood adaptation measures. As a follow-up, Quezon City is developing a flood Impact Risk Scale inspired by Rio de Janeiro. After assessing tools from Tel Aviv-Yafo and the Trust for Public Land, the city of Toronto is working on a new GIS tool to identify areas with multi-hazard risks. Durban and Tel Aviv-Yafo each sent cross-sectoral working groups to Copenhagen to deep dive into how to incorporate drainage in transportation and land use in a way that is financially feasible.



CITY HIGHLIGHT

In October 2019, the Mayor of Quezon City announced that the city would launch a new Climate Change and Environmental Sustainability Department (CCESD) with a dedicated unit on Inclusive Climate Action.

With C40 support, over 60 city staff members across city departments have been trained on how to incorporate inclusivity and equity into their climate planning activities. Quezon City also inspired other cities, such as Kuala Lumpur, to develop their own strategies and capacity using C40 tools.

The Adaptation Research Programme

The Adaptation Research Programme assists cities in making the case for adaptation action and develops tools and resources for adaptation planning. Highlights from 2019 include:

- The 'Measuring Progress in Urban Climate Change Adaptation' report, in partnership with Ramboll, provided a framework for measuring and tracking progress and impacts of cities' adaptation actions, piloted with Austin, Johannesburg and Quito.
- In November 2019, the report on <u>'Understanding</u> Infrastructure Interdependencies and Climate Risk

in Cities' was released in partnership with AXA. The research highlighted the barriers to cities' understanding of the links between climate risks and different sectoral infrastructure and presented solutions from 11 city case studies.

• 'Realising the Multiple Benefits of Climate Resilience and Inclusive Development in Informal Settlements' by C40 and partners explored how upgrading informal settlements can lead to improved resilience and inclusive benefits. For instance, upgrading actions in Nairobi led to reduced disease vectors, increased physical activity, improved air quality, reduced time and cost savings, increased earning potential and reduced GHG emissions.

credit-Kristian Brasen:C40

CITY HIGHLIGHT

KAUNDA

To face massive cloudburst events, Rio is upgrading its building codes to decrease the pressure on the drainage system, so that buildings will have to retain or infiltrate rainwater locally. London and Durban shared with Rio their methodologies of calculating the efficiency of the various solutions, such as green roofs, water attenuation tanks, rain gardens and blue roofs.

HOW CITIES ARE CREATING A JUST AND INCLUSIVE FUTURE FOR ALL



Delivering a <u>Global Green New Deal</u> – announced by new C40 Chair, Los Angeles Mayor Eric Garcetti in 2019 – means putting inclusive climate action at the centre of all urban decision-making to secure a just transition and improve equity for those disproportionately impacted by the climate crisis – people living in the Global South generally, and the poorest communities everywhere.

Global **Green New Deal** Principles

- 1. We recognise the global climate emergency.
- 2. We are committed to keeping global heating below the 1.5°C goal of the Paris Agreement by curbing emissions in the sectors that are the greatest contributors to the climate crisis: transportation, buildings, and waste.
- We are committed to putting inclusive climate action at the center of all urban decision-making, to create thriving and equitable communities for everyone.
- We invite our partners political leaders, CEOs, trade unions, investors, and civil society - to join us in recognising the global climate emergency and help us deliver on science-based action to overcome it.

The Inclusive Climate Action Programme provides cities with support to plan, build consensus around and deliver bold climate action that is equitable and beneficial for all. In 2019, the Programme provided:

- A <u>set of comprehensive resources</u> (over 30 tools and 70 practical case studies) to advance the delivery of urban climate action through an inclusive engagement and planning process resulting in more equitable outcomes for all.
- Technical support and training for over 150 city officials across 24 cities.
- The <u>ICA Webinar Series</u>, attracting over 450 individuals representing 43 C40 cities. City presenters from Durban, Nairobi, New York City, Buenos Aires, Sydney and Barcelona shared how they implement action that meets socio-economic needs.
- Key strategic partnerships with the Just Transition Center and the global union movement, Slum Dwellers International and the Mayors Migration Council.



MAYORS SHIFTING GLOBAL MARKETS

C40 and McKinsey's research Focused acceleration: A strategic approach to climate action in cities to 2030, analysed the biggest opportunities for cities to accelerate the reduction of their carbon emissions and to shift global markets. Based on the conclusions, C40 launched action-oriented 2030 Declarations, focusing on five priority areas where mayoral action can shift global markets: transport, buildings, waste, air quality and food systems. Various C40 Networks, which facilitate city-to-city exchange, collaboration and delivery in key areas, support the delivery of these declarations.

Green and Healthy Streets

Over 30% of greenhouse gas emissions from C40 cities come from transport, with traffic as the biggest source of air pollution globally. 28 C40 mayors have pledged to procure only zero-emission buses from 2025 and to ensure that a major area of their city

is zero emission by 2030, with a potential for more than 120,000 zero emission buses.

- Over the last ten years, there has been a rapid uptake of electric buses across C40 cities: from fewer than 100 in 2010 to more than 66,000 electric buses in 55 cities in 2019, representing 15-20% of the global electric bus fleet. The Chinese cities of Shenzhen and Guangzhou have both electrified their entire bus fleets, with a combined total of over 27,000 e-buses. This shift is already being met by a strong response from the market. Bloomberg New Energy Finance analysis for C40 cities found that, over the typical lifetime, it is cheaper to own an electric rather than a diesel bus.
- 15 C40 cities showcased the ambitious actions they are taking in the report <u>We Have the Power</u> to Move the World.



Clean Air

95% of residents of C40 cities live in areas that exceed World Health Organization (WHO) guidelines for annual average fine particulate matter, and over 50% in areas at 3 times the WHO guidelines. 35 C40 mayors <u>pledged</u> at the 2019 C40 World Mayors Summit to set targets and implement policies towards meeting WHO air quality guidelines by 2030. If they just reduce average PM2.5 pollution levels to WHO guidelines, it could avoid 40,000 deaths each year.

CITY HIGHLIGHT

Inspired by Rio de Janeiro during a C40 Air Quality Network webinar, the city of Quito replicated their partnership with NASA on air pollution forecasting models, tools and data, helping to further develop Quito's air quality management and public communication efforts.



Advancing Towards Zero Waste

The International Solid Waste Association estimates that if all waste management and reduction actions are considered, the waste sector could cut up to 20% of global GHG emissions. 22 C40 mayors committed to <u>advance towards zero-waste</u> with potential to divert up to 130 million tonnes of waste by 2030. They pledged to reduce, compared to 2015, the municipal solid waste generated per capita by 15% and the amount of waste sent to landfills and incineration by 50%, and to increase the diversion rate away from landfill and incineration to 70% by 2030. 18 C40 mayors are also already banning single-use plastics.

- ^o Los Angeles incorporated these goals into their 1.5 [°]C pathway compatible <u>Green New Deal</u>, released in April 2019. The city aims to reduce per capita waste generation by 15% by 2030 and expedited the roll-out of the citywide residential food scraps collection to 2021, among other commitments.
- Milan initiated a campaign for reducing the use of single-use plastic items and banned plastic cutlery in municipal school cafeterias. Other incentives to scale-up the initiative are being explored, such as tax reductions, support to logistics management, and new networking and knowledge sharing spaces.
- Sydney is encouraging reusable consumption items, aiming to reduce per capita residential waste by 15% by 2030. In July 2019, the city launched a new e-waste and food waste collection trial. These two new services are part of the City's plan to achieve its 35% source separated recycling target by 2021.

CITY HIGHLIGHT

With support from the C40 Sustainable Waste Systems network and inspiration from São Paulo and Buenos Aires, Accra developed a policy to include waste pickers as active players in waste collection, particularly in low income areas with a lack of private operators.

As a result, the city improved collection rates by 10%, increased recycling threefold and is saving USD 5 million per year. This project was recognised by an award at the C40 World Mayors Summit.



Net Zero Carbon Buildings

Buildings account on average for over 50% of city emissions in C40 cities. 23 C40 mayors committed to all zero-carbon new buildings by 2030. This alone could result in equivalent carbon savings of shutting down nearly 50 coal-fired power stations.

- Supported by the C40 Building Energy 2020 South Africa Buildings Programme, Durban, Johannesburg, Tshwane and Cape Town are developing new building regulations that exceed national building codes, with the aim of ensuring all new buildings are net zero carbon by 2030.
- The C40 China Buildings Programme supports Beijing, Fuzhou, Qingdao, and Shanghai (Changning District) on transformational building energy efficiency and renewable policies and works with national partners to scale the impact also in non-C40 Chinese cities. Copenhagen and Beijing are working together to pilot systems for district heating and buildings.

Good Food

Eating a sustainable diet and avoiding food waste could cut GHG emissions from the food we eat by more than 60%. The 'Planetary Health Diet' could save 11 million lives each year, if adopted universally, while dramatically reducing emissions and feeding a global population of 10 billion people.

 14 C40 mayors <u>pledged</u> at the 2019 C40 World Mayors Summit to work with citizens to transition to a planetary health diet by 2030. These 14 cities serve 500 million meals per year in schools, hospitals, and other public buildings.

CITY **HIGHLIGT**

New York City adopted Meatless Mondays as a means of improving health and environmental sustainability. The mayor issued an executive order that provides 1.1 million students with healthy, vegetarian meals every Monday. It will also reduce the city's purchase of beef by 50% and remove processed meat from NYC agencies.

C40 NETWORKS: DRIVING POLICY CHANGE IN HIGH IMPACT SECTORS

ENERGY AND BUILDINGS

- Private Building Efficiency
- Municipal Building Efficiency
- New Building EfficiencyClean Energy
- Clean Construction Forum

TRANSPORTATION AND URBAN PLANNING

- Zero Emission Areas
- Mass Transit
- Walking and Cycling
- Zero Emission Vehicles
- Land Use Planning

FOOD AND WASTE

- Food Systems
- Sustainable Waste Systems
- Waste and Resources

WATER AND ADAPTATION

- Cool Cities (Heat)
- Connecting Delta Cities (Coastal flooding/
- sea-level rise) • Urban Flooding

AIR QUALITY

• Air Quality



New C40 Programmes

Clean Construction Forum

C40 launched the Clean Construction Forum in May 2019, at the City of Oslo's initiative, to support cities in driving net zero embodied emissions from buildings and infrastructure. The Forum aims to shift the market to tackle construction consumptionbased emissions, whilst providing a platform for collaboration with the industry. The Mayors of Oslo, Copenhagen and Stockholm <u>committed</u> to clean construction, launching the <u>Building and</u> <u>Infrastructure Consumption Emissions</u> in-focus report at the C40 World Mayors Summit in October 2019.

Zero Emission Bus Rapid-Deployment Accelerator

Sponsored by Partnering for Green Growth and the Global Goals 2030 (P4G) and co-led by C40 Cities and the <u>International Council on Clean</u> <u>Transportation</u>, with support from the Centro Mario Molina-Chile and WRI, the <u>Zero Emission Bus Rapid-</u> <u>deployment Accelerator</u> (ZEBRA) catalyses the deployment of zero emission buses in Latin American cities. It focuses on:

- Cities: Ensure political commitments in Medellín, Mexico City, Santiago and São Paulo and translate these into fleet-wide strategies and innovative business models.
- Bus Industry: Make zero emission bus technology available in these cities through commitments from bus manufacturers.
- Financial institutions: Secure USD 1 billion for zero emission bus deployment from major financial institutions and investors, create a pipeline of projects.
- Knowledge sharing: through a regional virtual working group and an annual event.

Zero Emission Freight

Freight has consistently been identified as a key barrier in implementing zero emission areas in cities. Funded by ClimateWorks Foundation, C40's first Zero Emission Freight Academy, held in Vancouver in September 2019, gathered representatives from 10 C40 cities and 11 expert organisations. Following the Academy, the City of Rio started an evaluation of its freight vehicle access regulations, drafting a new decree in order to phase out non-zero emission freight vehicles from the downtown area. At the Academy, the City of Seattle also committed to rolling out two zero emission delivery pilots in 2020.

REMOVING BARRIERS AND ACCELERATING CLIMATE ACTION

In order to deliver on C4O's overall mission, a series of programmes have been devised to overcome key city barriers to action such as 'challenges accessing capital' and 'challenges working with the private sector'. These complement the work in C4O sectoral networks and climate action planning and adaptation programmes, which build city planning and implementation capacity.

Key Challenges to Urban Climate Action



Support to Cities

ACCESS TO CAPITAI	-		
C40 Cities Finance Facility	Financing Sustainable Cities Initiative	Divest/Invest Forum	
WORKING V PRIVATE SE			
City Solutions Platform	Reinventing Cities	Green Economy and Innovation Forum	City Business Alliance

Access to Capital

C40 Cities Finance Facility: Finance-ready projects in cities

The C40 Cities Finance Facility, delivered in partnership with the German development agency GIZ, supports Global South cities to develop financeready projects to reduce emissions and strengthen resilience against the impacts of climate change:

- The C40 Cities Finance Facility supports 19 projects (17 cities), including 5 outside C40.
- Two projects in Bogotá and one project in Mexico City have been successfully prepared, with a total investment volume of USD 220 million and an estimated saving potential of 905,310 tCO2 over 30 years (2020-50).
- The C40 Cities Finance Facility has engaged over 20 non-C40 cities through its knowledge dissemination activities on cycling, riverine management and zero-emission buses, enabling them to replicate its projects.





Financing Sustainable Cities Initiative: Scaled-up sustainable urban investment

The Financing Sustainable Cities Initiative, supported by the Citi Foundation, helps cities accelerate and scale-up investment in sustainable urban solutions through capacity building, peer knowledge-sharing, and technical assistance, across clean energy, transportation and adaptation projects. It has supported:

- Los Angeles' electric bus specification and shared procurement model;
- New Orleans' green mortgage programme;
- Chennai's new renewable energy net metering policy which enabled the city to procure 5.6MW of rooftop solar with plans to increase to 50MW;
- Auckland's electric bus roadmap, with all new buses zero emission from 2025.

C40 Divest/Invest Forum: Accelerated green investment outside of fossil fuels

Led by London and New York City, the C40 Divest/ Invest Forum is a first-of-its-kind initiative to help urban leaders make the leap to effective and efficient divestment and accelerate green investment. The Forum is designed to support cities and their pension funds in developing divest/invest strategies.

Besides the lead cities, Auckland, Boston, Cape Town, Copenhagen, Durban, Los Angeles, Melbourne, Oslo, Paris, Pittsburgh, San Francisco and Stockholm are also involved to date.

Divesting from Fossil Fuels, Investing in Our Future: <u>A Toolkit for Cities</u> was launched by Mayor of London Sadiq Khan and Mayor of New York City Bill de Blasio in January 2020, featuring a range of city case studies and practical guidance on how to deliver impactful Divest/Invest strategies.



Working with the Private Sector

City Solutions Platform: Public-private collaboration for innovative urban solutions

The <u>City Solutions Platform</u> breaks down barriers to implementation by facilitating early-stage, pre-procurement and pro-bono public-private collaboration to co-create and accelerate the implementation of innovative solutions to urgent urban climate challenges.

In 2019, the City Solutions Platform helped 5 cities (Tel Aviv-Yafo, Stockholm, Helsinki, Copenhagen and São Paulo) to co-create innovative solutions with contributions from around 300 business, NGOs, civil society and academia representatives. As part of the C40 World Mayors Summit 2019, City Solutions Platform Live @ BLOXHUB was convened by C40, CLEAN and Danish Design Centre, with over 70 thought leaders discussing solutions for Helsinki's <u>clean heat</u> challenge and Copenhagen's sustainable food procurement challenge.

CITY HIGHLIGHT

In October 2019, the São Paulo Municipal Urban Cleaning Authority and the City Solutions Platform team (supported by the Nordic Regional Hub) organised a co-creation workshop aimed at increasing diversion of organic waste from landfill.

The city is currently identifying companies that can provide GeoCovers for improving the efficiency of the composting market and further developing the concept of "EcoParks" with European and local partners.

Reinventing Cities: Lighthouse urban redevelopment projects

<u>Reinventing Cities</u> is a global competition that transforms underutilized urban spaces into innovative low carbon and resilient projects. In 2019, the first edition selected <u>20 winning projects</u> in Auckland, Chicago, Houston, Madrid, Milan, Montreal, Oslo, Paris, Reykjavik and San Francisco. The initiative also helped initiate systemic change in cities by catalysing engagement with 1,200+ companies, and raising media interest with 400+ press articles and more than 1 million impressions on social media.



Several projects set new standards (e.g. first zero carbon neighbourhood of Paris, first zero carbon social housing project in Italy, the largest urban solar farm in Texas) and solutions from the competition are already being scaled up (e.g. modular passive houses in Chicago).

To build on this success, C40 launched a second edition of Reinventing Cities in December 2019 with 25 new sites in 9 cities.

CITY **HIGHLIGHT**

Through the integration of sustainable building materials, green mobility solutions, urban agriculture, inclusive green jobs, and an innovative co-housing model, the Reinventing Cities winning project in San Francisco is a zerocarbon development that simultaneously addresses climate and two other defining local issues: housing availability and social inclusion.



Green Economy & Innovation Forum: Economic benefits of climate action

C40's Green Economy & Innovation Forum supports city economic and sustainability advisors to measure the job creation benefits of climate action and to engage the private sector. In 2019, C40 and Climate-KIC published <u>40 practical examples</u> on how cities can create prosperity for growing populations whilst transitioning through systemic change to lowcarbon economies. Other city efforts around green job creation include:

- Amsterdam's analysis on circular employment and mapping of current and future skills to prepare the workforce for a circular and just transition, featured also in the <u>Measuring Green Jobs in Cities:</u> <u>C40 Case Studies</u> booklet along with 5 other city examples from Vancouver, Toronto, Rio de Janeiro, Sydney and Paris.
- Salvador's initiatives to create jobs in climate and social innovation through start-up acceleration public calls, an innovation ecosystem portal, and co-working spaces.

City-Business Climate Alliance: Collaboration on transformative projects

The City-Business Climate Alliance (CBCA), launched in 2019, is a joint initiative of C40 Cities, CDP and the World Business Council for Sustainable Development, designed to accelerate climate action through city-business collaboration by replicating a blueprint for local city-business partnerships on joint, transformative projects.

The CBCA model builds on the successful experience of the London Business Climate Leaders initiative, supported by C40, CDP, The B Team and We Mean Business Coalition – through which the Mayor of London worked with leading companies including Derwent London, Sky and Tesco to take action on clean energy, sustainable buildings, clean transport, waste and circular economy.

MAYORS CHAMPIONING CLIMATE ACTION ON **THE GLOBAL STAGE**



C40's communications, events and diplomacy efforts strategically position C40 as one of the world's most impactful climate organisations by celebrating the ambitious, equitable action underway in C40 cities and establishing our mayors as key leaders in the global climate conversation.

City Diplomacy

C4O's City Diplomacy Programme brings the voice of mayoral climate leaders to the global stage and puts ambitious climate action by cities on the intergovernmental agenda. C4O members are also represented in global initiatives such as the Global Covenant of Mayors for Climate & Energy, the Global Climate Action Agenda, the Urban 20 and the Intergovernmental Panel on Climate Change (IPCC). 2019 highlights include:

- In May 2019, led by C40 European cities, the leaders of 328 cities across Europe, representing 62 million citizens, urged the European Council and Member States in an <u>open letter</u> to align ambition with the 1.5°C goal of the Paris Agreement.
- At the U20 Mayors Summit in May 2019 in Tokyo, cities from G20 states (U20) presented their recommendations on climate action, social inclusion and sustainable growth in a communique delivered to the Japanese Prime Minister ahead of the G20 Summit in Osaka. 35 major cities were

represented, including the mayors of Berlin, Jakarta, Rome, Rotterdam, and Tokyo. The <u>G2O Osaka</u> <u>Leaders' Declaration</u> includes language reflecting some of the recommendations to involve all levels of government in climate action, including nonstate actors, and support smart cities solutions as well as foster experience-sharing on smart cities.

- Over 50 mayors from the US attended the Climate Mayors Summit & US Conference of Mayors in Honolulu in June 2019, co-delivered with C40. A resolution passed committed the Conference to the 1.5°C target of the Paris Agreement.
- At the United Nations Secretary General's Climate Action Summit in September 2019, the mayors of Accra and Copenhagen presented C40's contributions in <u>areas</u> of finance, cooling, transport and resilience. C40 also supported the launch of the flagship "<u>Climate Emergency</u>, <u>Urban Opportunity</u>" report by the Coalition for Urban Transitions on how national governments can secure economic prosperity and avert climate catastrophe by transforming cities.
- At COP25 in Madrid, the <u>Climate Ambition Alliance</u> was launched. It recognises commitments from cities, nations and non-state actors to achieving net-zero emissions by 2050 in line with the objectives of the Paris Agreement. <u>Deadline</u> 2020 was the first such initiative recognised and identified as the main city partner.



C40 Events

Throughout the year, C40 delivers inspiring and innovative events where global decision-makers and key allies in the climate movement rally around ambitious climate action, and demonstrate their progress and dedication to do more.

October 9-12, 2019, Copenhagen: 2019 C40 World Mayors Summit

The 2019 C40 World Mayors Summit was the largest, most successful C40 event to date (<u>full highlights</u>). More than 75 leading mayors gathered alongside 1,700 global influencers, business leaders, youth activists, philanthropists, campaigners, scientists and more than 20,000 citizens, to commit to more ambitious climate action and showcase the innovative solutions that are creating healthier, more livable and resilient communities. Led by #TheFutureWeWant campaign, C40 experienced the strongest media coverage to date, with 3,000+ media articles from 100 countries, 1 billion social media impressions, and over 130 journalists present.

At the Summit, mayors from around the world announced their support for a <u>Global Green New</u> <u>Deal</u>, a global coalition that will put the world on a path to tackle the climate crisis, while delivering environmental justice. It also set the scene for future work of C40 under new Chair, Los Angeles Mayor Eric Garcetti's leadership. The Summit initiated a coalition between global youth leaders and mayors, launching the <u>Global Youth Initiative</u> which enables youth leaders to engage with mayors on climate advocacy and climate action in cities.

14 cities newly committed to <u>develop resilient and</u> <u>inclusive climate action plans compatible with 1.5°C</u> <u>pathways</u> (Berlin, Freetown, Istanbul) or signed C40 sectoral declarations.

The Cities & Business Forum, hosted at the Confederation of Danish Industry as part of the Summit, explored how cities and businesses can collaborate to develop the solutions and technologies needed for transformative climate action. Gathering 400 climate leaders, the Forum hosted 70 speakers, including 12 mayors and private sector speakers.

The C40 Bloomberg Philanthropies Awards celebrated the finalist (highlighted in <u>Cities100</u>) and winning projects at an evening Summit ceremony. The Awards are highly valued by C40 mayors, with 155 Awards applications received in <u>2019</u> alone. Seven cities (Accra, Guangzhou, Kolkata, London, Medellin, San Francisco and Seoul) received an award for their contribution in clean air, citizen engagement, resilience, green mobility, transformative change, renewable energy, and green technology.





February 21, 2019, Paris: Women4Climate Conference

• The 3rd C40 Women4Climate conference showcased how women are taking the lead on climate action. It gathered 450 guests, including 11 mayors, city representatives, businesses, innovators and, for the first time, a coalition of youth activists from the FridaysForFuture movement. The event featured in over 350 articles from 32 countries and generated 18.4 million impressions on social media. It included the finals of the Women4Climate Tech Challenge, a global contest for women designing an innovative, techfocused climate solution.

A report on Gender Inclusive Climate Action in Cities was also launched. 14 cities (Aix-en-Provence, Addis Ababa, Auckland, Barcelona, Freetown, London, Mexico City, Montreal, Paris, Tel Aviv-Yafo, Quito, Vancouver, Sydney, New Orleans) have launched a Women4Climate mentorship.

March 20, 2019, London: Divest/Invest Forum

• The first C40 Divest/Invest Forum launched the first-of-its-kind initiative to support city leaders that are committed to or are exploring divestment from oil, gas and coal and are accelerating green investments.

London and New York City both provided inspiring case studies of their cities' leadership, alongside views from representatives from the London Pensions Fund Authority, Wallace Global Fund, and Hermes Investment Management. A workshop with city and pension fund staff from 11 cities focused on how to implement a Divest/ Invest commitment, discussing exclusion criteria, fiduciary duty and steps to accelerate investment.

April 2, 2019, Beijing: C40 China Regional Forum & China Buildings Programme Event

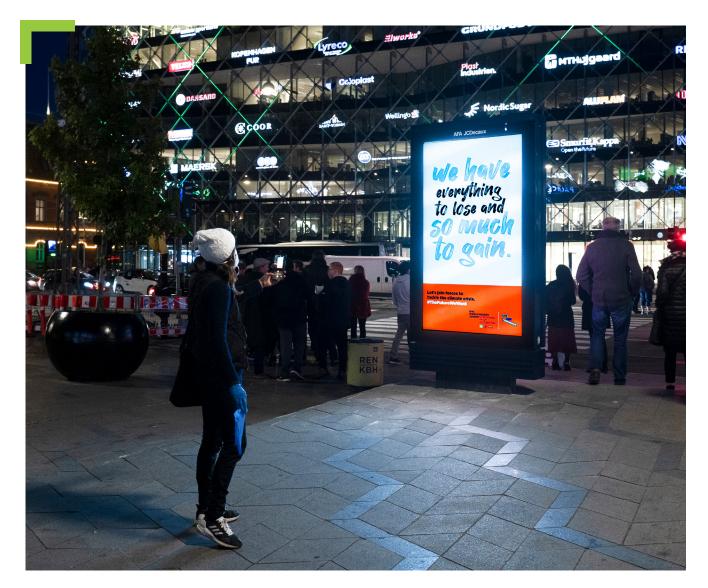
• The Forum was hosted in partnership with the CSTID at the Chinese Ministry of Housing and Urban Rural Development. Representatives from the Ministry of Ecology and Environment and the Ministry of Foreign Affairs also attended.

The C40 China Climate Action Planning Programme was launched at the event, with officials from 12 cities participating in a 2-day climate planning Academy. In parallel, a workshop of the C40 New Building Efficiency Network brought together 13 cities (Copenhagen, Durban, Tshwane, Joburg, Beijing, Shanghai (Changning District), Qingdao, Fuzhou, Cape Town, Washington DC, LA, Portland, Seattle, Tokyo) to exchange best practice on roadmaps for the decarbonisation of new buildings.

June 12, 2019, Johannesburg: Financing Sustainable Cities Forum

• The Financing Sustainable African Cities Forum was held in response to a direct request from cities in the region for a platform to both publicly highlight unique financing challenges for African cities and to hold more informal discussion with peers, technical experts and investors.

The event attracted 150 guests, including over 60 city delegates from 10 C40 cities across the continent, including the Mayors of Johannesburg; Tshwane and Accra. The event featured in 140 pieces through Africanews, Mail, Guardian, Global Finance and others.



Global Media and Digital Outreach

Significant coverage in the mainstream media provides C40 with global attention and helps position our mayors as key leaders of the global climate movement.

In 2019, C40 was mentioned in more than 12,000 articles from 127 countries and achieved coverage in international media outlets such as: National Geographic, China Daily, Vox, Bloomberg, El País, Reuters, Deutsche Welle, BBC, Los Angeles Times, Le Monde, The New Yorker, The Washington Post,, Corriere Delle Sera, Liberation, The Japan Times, AP, AFP. C40 media partners include the New York Times; The Guardian; Asahi Shimbun; Reuters; CNN; San Francisco Chronicle; ELLE Magazine; El Pais; Milenio, Brut., and many others. The C40 Communications Advisors Network hosts regular meetings with senior communications city staff around upcoming communications plans.

C40's social media channels (<u>C40 Twitter</u>, <u>C40</u>

Instagram, C40 Facebook, C40 LinkedIn, C40 YouTube) drive the global conversation around cities taking ambitious climate action and create momentum around key events and campaigns. #TheFutureWeWant campaign took center stage in 2019, featuring innovative multimedia content from mayors, activists and artists. It communicated a vision of a future that is inclusive, liveable, sustainable, healthy and bright. Overall, the campaign received more than 1 billion impressions and 23,500 individual posts mentioned C40 in the run-up to the C40 World Mayors Summit, reaching 90 million people.

The C40 Knowledge Hub

Launched at the C40 World Mayors Summit in October 2019, the <u>C40 Knowledge Hub</u> provides unique insights and expertly curated content, geared specifically towards city decision makers and practitioners, as well as Al-driven peer-to-peer connection, training and engagement tools. The Hub also hosts private city pages to help track cities' progress.



GOVERNANCE

Steering Committee Members - 2019

The C40 Steering Committee is made up of mayors of C40 cities and provides strategic direction and governance to the organisation. Members are elected to represent their geographic region, as well as those cities in C40's Innovator category.



C40 Cities Climate Leadership Group Inc (USA) - Board of Directors - 2019

The C40 Board of Directors oversees the management and operations of the organisation.



Children's Investment Fund Foundation

nt Chief Finance Officer, Durban

Jesper Nygård, **Realdania**

Deputy Mayor, London

C40 Management Team - 2019



C40 Global Offices

C40 has registered offices in the United States, United Kingdom and South Africa, and a representative office in China.

FUNDERS, PARTNERS AND FINANCIALS

Strategic Funders

Bloomberg Philanthropies

Bloomberg Philanthropies invests in 510 cities and 129 countries around the world to ensure better, longer lives for the greatest number of people. The organization focuses on five key areas for creating lasting change: Arts, Education, Environment, Government Innovation, and Public Health. Bloomberg Philanthropies encompasses all of Michael R. Bloomberg's giving, including his foundation and personal philanthropy as well as Bloomberg Associates, a pro bono consultancy that works in cities around the world. In 2018, Bloomberg Philanthropies distributed \$767 million. For more information, visit www.bloomberg.org.

CHILDREN'S INVESTMENT FUND FOUNDATION

The Children's Investment Fund Foundation (CIFF) is an independent philanthropic organisation, with offices in Addis Ababa, Beijing, London, Nairobi and New Delhi. Established in 2003, CIFF works with a wide range of partners seeking to transform the lives of children and adolescents in developing countries. Areas of work include maternal and child health, adolescent sexual health, nutrition, education, deworming, tackling child slavery and exploitation, and supporting smart ways to slow down and stop climate change. For more information, visit <u>www.ciff.org</u>.

Realdania

Realdania is a Danish philanthropic association with around 165.000 members. The association seeks to improve quality of life through the built environment, defined as the physical settings for our everyday life. Realdania is focused on both living and future generations and has since the year 2000 supported more than 3.900 projects with a total of DKK 20 billion (approximately US\$ 2,9 billion). The association takes action to prevent the climate crisis, through national and international engagement. Anyone in Denmark who owns real estate can become a member. For more information, visit <u>www.realdania.org</u>.

Major Funders

- Arup
- Citi Foundation
- Clean Air Fund
- Department for Business, Energy and Industrial Strategy of the United Kingdom (BEIS)
- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Germany)
- Johnson & Johnson
- Ministry of Foreign Affairs of Denmark
- Oak Foundation

Funders and Partners

- Autodesk Inc.
- AXA
- Bernard Van Leer Foundation
- Cities Alliance / United Nations Office for Project
 Services
- Citelum
- Climate KIC EIT
- The Climate Change Collaborative
- ClimateWorks Foundation
- Dell
- Eat Foundation
- European Climate Foundation
- Food and Agriculture Organisation for the United Nations (FAO)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- Google
- Grundfos
- INKGA / IKEA
- KR Foundation
- L'Oréal
- Mastercard
- McConnell Foundation
- Michelin Corporate Foundation
- Microsoft
- Novo Nordisk
- Qlik
- Ramboll Foundation
- Rockefeller Brothers Fund
- ROCKWOOL Group
- Suez North America
- Wallace Global Fund
- The William and Flora Hewlett Foundation
- World Bank / Global Environment Facility
- Velux

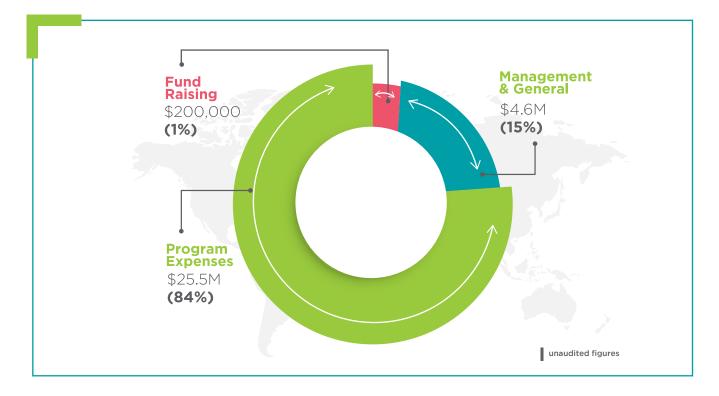
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- United States Agency for International Development (USAID)
- Children's Investment Fund Foundation (CIFF)

Financials



EXPENSES



CONCLUSION - A BRIDGE TO THE **DECADE OF CLIMATE ACTION**

In 2017, C40 agreed its most ambitious four-year Business Plan yet to meet the objectives of the Paris Agreement. The number of mayors committed to developing resilient and inclusive climate action plans aligned with 1.5°C pathways demonstrates their determination.

The collective progress C40 mayors have made against their planning targets and their commitments to action-oriented declarations provides strong evidence of their leadership at a local level and sets them on track to reducing emissions in their cities.

However, since 2017, we have also seen intergovernmental discussions stall, hindering the prospect of significant emissions reductions at a global scale.

The success achieved by C40 mayors over these four years and beyond will not be enough to keep our planet within a temperature rise of 1.5°C if it isn't replicated by other local, regional and national governments.

This is why in the decade of 2020, C40 mayors, led by the mayoral Steering Committee, aim to accelerate action in their cities and bring their leadership to the next level to inspire many more decision makers across the world.

THANK YOU PLEASE STAY IN TOUCH WITH C40

www.c40.org www.c40knowledgehub.com



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